

REMARKS

By this Amendment, claims 21-23, 25-27, 29-31, 33-35, 37-38, 40-42, 44-46, 48-49, 51-53, 55-57 and 59-60 are cancelled, and claims 1-20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 are amended. Thus, claims 1-20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 are active in the application. Reexamination and reconsideration of the application are respectfully requested.

The specification and abstract have been carefully reviewed and revised in order to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Also attached hereto is a marked-up version of the substitute specification and abstract illustrating the changes made to the original specification and abstract.

On page 2 of the Office Action, claims 1-3, 5-7, 9-11, 13-15, 17-18, 20-22, 24-26, 28-30, 32-34, 36-37, 39-41, 43-45, 47-48, 50-52, 54-56 and 58-59 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kuzma (U.S. 5,781,901). This rejection is believed to be moot with respect to claims 21-22, 25-26, 29-30, 33-34, 37, 40-41, 44-45, 48, 51-52, 55-56 and 59 in view of the cancellation of these claims.

Without intending to acquiesce to this rejection, independent claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 have each been amended in order to more clearly illustrate the marked differences between the present invention and the applied references. Accordingly, the Applicants respectfully submit that the present invention is clearly patentable over the applied references for at least the following reasons.

In conventional e-mail transmission transmission/reception systems, a first user at a first computer terminal is able to transmit an e-mail to a second user at a second computer terminal through the Internet. The e-mail from the first user to the second user may include an attachment (attached file(s), e.g. word processing file, picture file) that cannot be transmitted in the body of the e-mail. Typically, the e-mail is transmitted to a server and is then routed to the second user. If the second user is at a computer terminal at home or in the office, the second user can receive the attachment.

However, new usage patterns of the Internet such as mobile computing and mobile Internet are becoming more common. Mobile computing involves a cellular phone or Personal Handyphone Systems (PHS), for example, being connected to a computer or a Personal Digital

Assistant (PDA) and accessing the Internet through the computer or PDA. Mobile Internet involves mobile devices such as cellular phones and PHSs directly accessing the Internet. Mobile computing and mobile Internet allow users to send and receive e-mail at anytime and anyplace.

However, when sending e-mail with attached files to a cellular phone or a PHS, the attached files are automatically deleted in most mobile Internet services. Alternatively, conventional mobile Internet services will forward an e-mail to the cellular phone or PHS of the user instructing the user that an e-mail sent to the user included an attachment, and the attachment is stored on a server of the mobile Internet service. With this instruction, the user can forward the e-mail transmitted to the user's cellular phone or PHS to the user's personal computer, and then access the server by using the personal computer in order to receive the attachment included in the original email.

Other conventional mobile Internet services include a mail gateway, a mail terminal and a mail server, where the mail gateway relays e-mail between the mail terminal and the mail server. In this conventional service, the mail terminal does not transmit the attachment to the mail server when transmitting an e-mail to the mail server. Instead, when receiving an acquisition request for the e-mail, which is received by the mail server from the mail terminal, the mail gateway acquires the e-mail from the mail server, separates an attached file from the e-mail, stores the separated file having a mail ID, and manages the file. When receiving e-mail (consisting of the main body and a mail ID for identifying the original mail) that should be forwarded to another address from the mail terminal, the mail gateway attaches the stored and managed attached file to the e-mail on the basis of the mail ID for identifying the original mail and sends the e-mail consisting of the main body and the attached file to the mail server. This conventional system thus enables the mail terminal to send e-mail with an attached file to a forwarding address only by sending e-mail having a mail ID for identifying the original mail to the mail gateway.

However, according to this conventional system, when a plurality of attached files are included in the mail, there is a problem in that a file to be attached cannot be selected from the plurality of attached files because all files included in the e-mail are unconditionally attached to the e-mail and mail IDs are used for linking e-mail and attached files. That is, in this conventional system, it is impossible to send e-mail including an attached file that a user selects

from among a plurality of attached files without attaching the attached file by the mail terminal.

To solve the problems and disadvantages with the conventional systems, the present invention provides an e-mail transmission/reception system including a mail terminal, a mail server and a mail gateway. The present invention also provides a method for controlling an e-mail transmission/reception system including the mail terminal, the mail server and the mail gateway, as well as a recording medium having a program embodied thereon for causing a computer to perform the operations of the method of the present invention.

The present invention distributes an attachment, instead of merely a reference to the attachment, to one or more recipients of the e-mail by the mail terminal acquiring one or more identifiers for each attachment and preparing an attached-file specifying e-mail that includes the identifiers, and the mail gateway constructing a file attached email corresponding to the identifiers included in the attached-file specifying e-mail and distributing the constructed file attached e-mail to one or more recipients of the e-mail.

Furthermore, the present invention provides that the mail terminal prepares the attached-file specifying e-mail which includes the one or more identifiers, where the identifiers are selected by a user of the mail terminal. Accordingly, the present invention obtains an advantageous effect in that the user of the mail terminal is able to transmit e-mail including only a desired number of attachments that the user selects from among a plurality of attachments that are included in the e-mail.

Accordingly, the present invention provides that, once the user selects desired attachments from among a plurality of attachments, an e-mail including the selected attachments is transmitted to the mail recipient without requiring the mail terminal to attach the selected attachments to the e-mail.

Therefore, according to the present invention, e-mail including attachments can be sent to recipients even in the case where the mail terminal is a cellular telephone or any other terminal device which is limited in the amount of memory and/or display capabilities and is therefore incapable of directly accessing the attachments. Consequently, the present invention provides numerous advantageous aspects for the mobile Internet and computing services described above.

Claims 1 and 5 recite the e-mail transmission/reception system of the present invention. Claims 9 and 13 recite the mail gateway of the present invention. Claim 17 recites the mail terminal of the present invention. Claims 20, 24, 28, 32 and 36 each recite a method for

performing operations similar to the e-mail transmission/reception system, mail gateway and mail terminal recited in claims 1, 5, 9, 13 and 17, respectively. Claims 39, 43 and 47 recite a recording medium having a program embodied thereon for causing a computer to conduct operations similar to the operations recited in claims 28, 32 and 47. Claims 50, 54 and 58 recite a program embodied on a computer-readable medium of a computer for causing a computer to conduct operations similar to the operations recited in claims 28, 32 and 47.

Independent claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 recite the advantageous and novel features of the present invention as described above.

Kuzma discloses a system for transmitting an e-mail attachment over a network. The system of Kuzma seeks to minimize storage and bandwidth resources for a network due to the size of files attached to an e-mail (see Column 1, lines 20-50 and Column 4, lines 49-62). To minimize the effect of attachments on storage and bandwidth resources, the system of Kuzma does not transmit an attachment to the recipient of an e-mail. Instead, the attachment is removed from the e-mail and stored either at the sending user's computer or at a server, which each have a unique address (e.g., URL), and a reference to the attachment is added to the e-mail to be sent to the recipient. The reference included in the e-mail to the recipient is much smaller in size (e.g., 100 to 200 bytes, see Column 6, lines 4-6) than the original attachment sent to the recipient, and the reference allows the recipient to retrieve the attachment from the sending user's computer or the server where the attachment is stored, because the reference identifies the location where the attachment is stored (see Column 4, line 65 to Column 5, line 50). It is important to note that the recipient in Kuzma obtains the attachment if he or she desires, but the server or mail gateway does not provide the recipient with a file attached email.

On the other hand, as described above, the present invention distributes an attachment, instead of merely a reference to the attachment, to one or more recipients of the e-mail by the mail terminal acquiring one or more identifiers for each attachment and preparing an attached-file specifying e-mail that includes the identifiers, and the mail gateway constructing a file attached email corresponding to the identifiers included in the attached-file specifying e-mail and distributing the constructed file attached e-mail to one or more recipients of the e-mail. Furthermore, the present invention provides that the mail terminal prepares the attached-file specifying e-mail which includes the one or more identifiers, where the identifiers are selected by a user of the mail terminal. Therefore, the user of the mail terminal is able to transmit e-mail

including only a desired number of attachments that the user selects from among a plurality of attachments that are included in the e-mail.

These features of the present invention are clearly not disclosed or suggested by Kuzma.

In particular, Kuzma does not disclose or suggest a mail server comprising a mail distribution unit operable to receive a file attached e-mail transmitted from the mail gateway and distribute the file attached e-mail to a respective address of one or more receivers of the e-mail, as recited in claim 1.

Similarly, Kuzma does not disclose or suggest a mail terminal comprising a preparation unit operable to prepare the attached-file specifying e-mail including the one or more identifiers selected by the user from the identifier list as substitutes for one or more attached files that the user wants to attach to the e-mail, and a transmission unit operable to transmit the prepared attached-file specifying e-mail to the mail gateway.

Moreover, Kuzma does not disclose or suggest a mail gateway comprising an attached file acquisition unit operable to acquire attached files from an attached file holding unit, which holds one or more attached files included in the original e-mail, where the attached files correspond to the identifiers included in the attached-file specifying e-mail received by the reception unit, a construction unit operable to construct a file attached e-mail by attaching the attached files acquired by the attached file acquisition unit to the attached-file specifying e-mail received by the reception unit; and a mail transmission unit operable to transmit the file attached e-mail constructed by the construction unit to the mail server, as recited in claim 1.

Therefore, claim 1 is clearly not anticipated by Kuzma since Kuzma fails to disclose or suggest each and every limitation of claim 1.

The Applicants respectfully submit that independent claims 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 are also clearly not anticipated by Kuzma, because claims 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 each recite limitations similar to those of claim 1 described above which Kuzma clearly does not disclose.

Accordingly, the Applicants respectfully submit that claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58.

On page 7 of the Office Action, claims 4, 8, 12, 16, 19, 23, 27, 31, 35, 38, 42, 46, 49, 57 and 60 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuzma in view of Okada et al. (U.S. 6,836,891). This rejection is believed to be moot with respect to claims 23,

27, 31, 35, 38, 42, 46, 49, 57 and 60 in view of the cancellation of these claims.

As demonstrated above, Kuzma clearly does not disclose or suggest each and every limitation of 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58. Similar to Kuzma, Okada et al. also clearly fails to disclose each and every limitation of claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58.

Therefore, no obvious combination of Kuzma and Okada et al. would result in the inventions of claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58 since Kuzma and Okada et al., either individually or in combination, clearly do not disclose or suggest each and every limitation of claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58.

Furthermore, it is submitted that the clear distinctions discussed above are such that a person having ordinary skill in the art at the time the invention was made would not have been motivated to modify Kuzma and Okada et al. in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58. Therefore, it is submitted that the claims 1, 5, 9, 13, 17, 20, 24, 28, 32, 36, 39, 43, 47, 50, 54 and 58, as well as claims 2-4, 6-8, 10-12, 14-16 and 18-19 which depend therefrom, are clearly allowable over the prior art as applied by the Examiner.

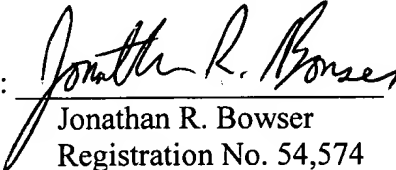
In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

A fee and a Petition for a one-month Extension of Time are filed herewith pursuant to 37 CFR § 1.136(a).

Respectfully submitted,

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